Date: Mon, 1 Nov 93 04:30:39 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #90
To: Ham-Homebrew

Ham-Homebrew Digest   Mon, 1 Nov 93   Volume 93 : Issue   90

Today's Topics:

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 30 Oct 1993 17:02:33 GMT
From: psinntp!isc-newsserver!rit!atd@uunet.uu.net
Subject: ACS 0.12 (Al's Circuit Simulator) posted to alt.sources
To: ham-homebrew@ucsd.edu

A new release (0.12) of ACS (Al's Circuit Simulator) has been posted
to alt.sources. It is also available by ftp from cs.rit.edu or
ee.rochester.edu, and by modem by dialing (in USA) 716-272-1645.

ACS is a general purpose mixed analog and digital circuit simulator.
It performs nonlinear dc and transient analyses, and ac analysis
linearized at an operating point. At this point the analog is
stronger than the digital. It is fully interactive and command
driven. It can also be run in batch mode or as a server. The
output is produced as it simulates. Spice compatible models for
the MOSFET (level 1 and 2) and diode are included in this release.
Other models including BJT are (still waiting) in the testing phase.

Since it is fully interactive, it is possible to make changes and

re-simulate quickly. The interactive design makes it well suited to the typical iterative design process used it optimizing a circuit design.

It is also well suited to undergraduate teaching where Spice in batch mode can be quite intimidating. This version, while still officially in beta test, should be stable enough for basic undergraduate teaching and courses in MOS design, but not for bipolar design. I recommend it for lower level courses where you want to introduce simulation but don't want to tie up your CAD system. Every student can have his/her own copy of the full simulator. It is easier to use than Spice, but the language is the same so the transition should be easy. Schematic programs that work with Spice should also work with ACS.

In batch mode it is mostly Spice compatible, so it is often possible to use the same file for both ACS and Spice.

The analog simulation is based on traditional nodal analysis with iteration by Newton's method and LU decomposition. An event queue and incremental matrix update speed up the solution considerably for large circuits and provide some of the benefits of relaxation methods but without the drawbacks.

It also has digital devices for true mixed mode simulation. The digital devices may be implemented as either analog subcircuits or as true digital models. The simulator will automatically determine which to use. Networks of digital devices are simulated as digital, with no conversions to analog between gates. This results in digital circuits being simulated faster than on a typical analog simulator, even with behavioral models.

ACS also has a simple behavioral modeling language that allows simple behavioral descriptions of most components including capacitors and inductors.

ACS uses an object oriented approach to modeling. Complex models like MOSFETS are made of simpler ones like resistors, capacitors, diodes, and any other models that may already exist. The model designer does not need to worry about details like convergence checking, bypass checking, integration, or how the new device plugs into the solution matrix because these are already taken care of by the basic models. This results in a dramatic improvement in the time it takes a researcher or model designer to install a new model, compared to Spice.

The source and documentation can be obtained by anonymous ftp from ee.rochester.edu or cs.rit.edu in /pub/acs. It can also be obtained

by dial-up (USA) 716-272-1645 in /pub/acs. It may be distributed
under the terms of the GNU general public license. The dial-up
also has some test circuits, pre-compiled executables for Next,
Sun3, Sun4, Ultrix, MSDOS and possibly others, and documentation
in dvi and postscript.

If you are tired of Spice and want a second opinion, you want to
play with the circuit and want a simulator that is interactive, or
you want to study the source code and want something easier to
follow than Spice, try ACS.

ACS is an ongoing research project. It is being released in a
preliminary phase in hopes that it will be useful and that others
will use it as a thrust or base for their research. I also hope
for some comments that may help me direct my research.

Albert Davis, 136 Doncaster Rd., Rochester, NY 14623, USA.
email: atd@cs.rit.edu or davis@ee.rochester.edu
fax/data: (USA) 716-272-1645

Date: 31 Oct 1993 20:25:52 GMT
From: library.ucla.edu!agate!howland.reston.ans.net!news.moneng.mei.com!uwm.edu!
msuinfo!caspian!cravitma@network.ucsd.edu
Subject: Building Yagis
To: ham-homebrew@ucsd.edu

I am interested in trying to build a Yagi antenna (for 2m, I think,
initially -- I may try others later). If anyone has any formulas for
element length, spacing, etc, construction tips or similar, or
pointers to this info on Internet, and could email me, I would
appreciate it. In particular, I need to know how to calculate the
element length and spacing.

Thanks, and 73,

/MC (shortly to be licensed)

Matthew Cravit | "So I sent him to ask of the
Michigan State University | owl, if he's there, how to
East Lansing, MI 48825 | loosen a jar from the nose
E-Mail: cravitma@cps.msu.edu | of a bear..."

--
Matthew Cravit | "So I sent him to ask of the
Michigan State University | owl, if he's there, how to
East Lansing, MI 48825 | take off a jar from the nose

E-Mail: cravitma@cps.msu.edu | of a bear..."

Date: 1 Nov 1993 06:04:51 GMT
From: swrinde!cs.utexas.edu!convex!cnn.exu.ericsson.se!ericom!sunic!news.funet.fi!
news.eunet.fi!rhea.otol.fi!rhea!tuekdahl@network.ucsd.edu
Subject: Building Yagis
To: ham-homebrew@ucsd.edu

**** Matthew B Cravit (cravitma@cps.msu.edu) wrote: ****
>I am interested in trying to build a Yagi antenna (for 2m, I think,
>initially -- I may try others later). If anyone has any formulas for
>element length, spacing, etc, construction tips or similar, or
>pointers to this info on Internet, and could email me, I would

Hi, you can get calculation software in nic.funet.fi .
address: nic.funet.fi (FTP)
password: your e-mail address
directory: pub/ham/antenna/
files:yagimax, antenna ...
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****
Tuomo Ekdahl email: tuekdahl@otol.fi
Tel: int+358 81 5501 565 ekdahl@ncsvax.ntc.nokia.com
****

Date: Mon, 1 Nov 1993 07:31:04 GMT
From: raven.alaska.edu!aurora.alaska.edu!fsrla@decwrl.dec.com
Subject: CB to 10M....How???
To: ham-homebrew@ucsd.edu

Has anyone modified the Midland 77-094
for use on 10M?????
If so, how'd you do it?
Please email me with info on how to do
it, and how it sounded after.
Thanks for your time!

Roger Asbury WL7NT
FSRLA@AURORA.ALASKA.EDU

Date: Mon, 1 Nov 1993 06:00:14 GMT
From: swrinde!emory!europa.eng.gtefsd.com!paladin.american.edu!

howland.reston.ans.net!spool.mu.edu!umn.edu!csus.edu!netcom.com!
camilla@network.ucsd.edu
Subject: RADIO EQUIPMENT REQUEST
To: ham-homebrew@ucsd.edu

[Article crossposted from rec.radio.shortwave]
[Author was Camilla Cracchiolo]
[Posted on Mon, 1 Nov 1993 05:53:30 GMT]

The local branch of the Committee for Development and Democracy in
El Salvador asked me to post the following request for radio equipment.

Please do NOT respond to me personally by e-mail. Respond instead, only
to the address and phone listed in the body of this request.

But if you remember, please tell them that you found out about it from
the Internet. I want them to see the potential the Internet has to
help groups like theirs. Thank you.

.............REQUEST FOR RADIO EQUIPMENT.............

The Committee for Development and Democracy in El Salvador (CODDES) is
involved in raising money and equipment for Radio Farabundo Marti in
El Salvador.

During the war, Radio Farbundo Marti was one of the main opposition voices.
They are now, finally, a legal and recognized station. Radio Farabundo
Marti was founded January 22, 1982 in the mountains of Chalantenango to
provide an alternative analysis to the government controlled radio
and television stations.

Military operations during the 12 year civil war severely affected the
operation of the station. There were many military attacks against its
base stations. Because of these conditions, 18 members of Farabundo
Marti died during the war.

Now the station is legal. Democratic elections have been set for March
1994 and Radio Farabundo Marti wants to participate in setting a new
course for the country.

RADIO FARABUNDO MARTI NEEDS EQUIPMENT AND MONEY TO CONTINUE AND EXPAND
ITS BROADCASTING.

Please help us in this effort. A complete list of needed equipment is
available upon request. If you can contribute equipment to the radio
station, please contact us at:

CISPES P.O. BOX 57337 LOS ANGELES, CALIF. 90057

Please make checks payable to CISPES/FM RADIO.

You will receive an immediate reply when corresponding with us and an immediate acknowledgment of all contributions. This will include an upldate on El Salvador and a letter from Radio Farabundo Marit, with further information about the radio's projects and broadcasting schedule. The radio station is now a totally 'above-ground' legal entity in El Salvador, recognized by the government of El Salvador as legitimate. If you do not want that follow-up information, simply make that clear when contributing.

Muchas Gracias! Many thanks from CISPES, CODDES, and RADIO FARABUNDO MARTI!

Phone information is available at: 213-852-0721

End of Ham-Homebrew Digest V93 #90
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